BIBLIOTHECA MEDICA CANADIANA

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INFORMATION FOR CONTRIBUTORS / AVERTISSEMENT AUX AUTEURS

The **Bibliotheca Medica Canadiana** is a vehicle providing for increased communication among all health libraries and health sciences librarians in Canada. We have a special commitment to reach and assist the worker in the smaller, isolated health library. Contributors should consult recent issues for examples of the type of material and general style sought by the editors. Queries to the editors are welcome. Submissions in English or French are welcome.

La **Bibliotheca Medica Canadiana** a pour objet de permettre une meilleure communication entre toutes les bibliothèques médicales et entre tous les bibliothécaires qui travaillant dans le secteur des sciences de la santé. Nous nous engageons tout particulièrement à atteindre et à aider ceux et celles qui travaillant dans les bibliothèques de petite taille et les bibliothèques relativement isolées. Si vous désirez nous soumettre un manuscrit, vous êtes prié de consulter quelques livraisons récentes de la revue pour vous familiariser avec le contenu et le style général recherchés par la rédaction. La rédaction recevra avec plaisir vos questions et observations. Les articles en anglais ou en français sont bienvenus.

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INFORMATION FOR CONTRIBUTORS

MANUSCRIPTS

The editors of **Bibliotheca Medica Canadiana** welcome any manuscripts or other information pertaining to the broad area of health sciences librarianship, particularly as it relates to Canada.

Contributions should be submitted **in duplicate** and the author should retain one copy. Contributions should be **typed double-spaced** and **should not exceed six pages or 2100 words.** Pages should be numbered consecutively in arabic numerals in the top right-hand corner. Articles may be submitted in French or in English but will not be translated by the editors or their associates. Style of writing should conform to acceptable English usage and syntax; slang, jargon, obscure acronyms and/or abbreviations should be avoided. Spelling shall conform to that of the **Oxford English Dictionary**; exceptions shall be at the discretion of the editors. Contributors who wish to submit their work in machine-readable format should contact the editors in advance to ensure that compatible equipment is available in the editorial offices.

All contributions should be accompanied by a covering letter which should include the author's (typed) name, title and affiliations, as well as any other background information that the contributor feels might be useful to the editorial process.

REFERENCES

All references should be given in the Vancouver style; see **Canadian Medical Association Journal** 1985;132:401-5. Contributors are responsible for the accuracy of their references. Personal communications are not acceptable as references. References to unpublished works shall be given only if obtainable from an address submitted by the contributor.

ILLUSTRATIONS

Any illustrations or tables submitted should be black and white copy camera-ready for print. Illustrations and tables should be clearly identified in arabic numerals and should be well-referenced in the text. Illustrations and tables should include appropriate titles.

AVERTISSEMENT AUX AUTEURS

MANUSCRITS

Les rédacteurs de la **Bibliotheca Medica Canadiana** sont à la recherche de manuscrits ou d'autres renseignements portant sur le vaste domaine de la bibliothéconomie dans le contexte des sciences de la santé. Nous recherchons tout particulièrement des articles relatifs à la situation au Canada et à des thèmes d'actualité.

Les articles devraient être remis **en deux exemplaires** et l'auteur devrait en garder une copie. Les articles devraient être **dactylographiés à double interligne et ne devraient pas dépasser six pages ou 2100 mots**. Prière de numéroter les pages consécutivement en chiffres arabes en haut de la page à droite. Les articles peuvent être remis en français ou en anglais, mais ils ne seront pas traduits par la rédaction ni par les associés de la rédaction. Le style d'expression écrite se conformera à l'usage et à la syntaxe acceptables du français; il est préférable d'éviter l'argot, les sigles et autres abréviations obscures. L'ortographe se conformera à celle du **Robert**; les exceptions à cette règle seront à la discrétion de la rédaction. Les auteurs qui désirent remettre leurs manuscrits sous forme électronique devraient communiquer à l'avance avec la rédaction afin de s'assurer que l'équipement compatible est disponible aux bureaux de la rédaction.

Tout article devrait s'accompagner d'une lettre explicative fournissant les informations suivantes: nom de l'auteur (dactylographié), son titre et lieu de travail, ainsi que tout autre détail que l'auteur jugerait utile à la rédaction.

REFERENCES

Toute référence devrait être citée selon le style dit de Vancouver; voir le **Journal de l'Association médicale canadienne** 1985;132:401-5. Les auteurs sont responsables de l'exactitude de leurs références. Les communications de nature personnelle ne sont pas acceptables comme références. Il ne faut citer une référence à un ouvrage inédit que si ce dernier est disponible à une adresse indiquée par l'auteur.

ILLUSTRATIONS

Les illustrations et les tableaux doivent être en noir et blanc, et prêts à l'impression. Les illustrations et les tableaux doivent être clairement identifiés en chiffres arabes et avoir des renvois clairs dans le corps du texte. Les illustrations et tableaux doivent comporter des titres pertinents.

BIBLIOTHECA MEDICA CANADIANA NEWSGATHERING FORM

The editors welcome news items from members of the Canadian Health Libraries Association, or any news that may be of interest to members. Please feel free to copy this form in any way for submission, and to attach separate sheets for lengthy items.

APPOINTMENTS Who
HONOURS? What
AWARDS? When
Where

PROMOTIONS? Who
MOVES? From
RESIGNATIONS? To
When

SEMINARS? What
WORKSHOPS? When
Where

PUBLICATIONS? What
BOOK REVIEWS? Where
Citation

ACQUISITIONS? What
GIFTS? Why
GRANTS? Amount
Donor

TRIPS? Who
LECTURES? Where
VISITORS? When
Why

From:

To:
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Bibliotheca Medica Canadiana est publié 4 fois par année par l'Association des Bibliothèques de la Santé du Canada. Les articles paraissant dans **BMC** expriment l'opinion de leurs auteurs ou de la rédaction et non pas celle de l'Association.

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FROM THE EDITORS

This issue contains the results of Continuing Education Coordinator **Linda Wilcox's** survey of the best Canadian reference sources. There are articles on physician use of library software and preparation for end-user training. There are also papers by the three participants in a panel discussion on interlibrary loans hosted by the Toronto Health Libraries Association.

The editors would like to thank those who contributed material, some of whom did so on very short notice. Submission on disk is especially welcome! We would like to encourage others to publish in **BMC**. You may want to update others on happenings in your library or area such as the grant received at the University of Alberta John W. Scott Health Sciences Library as published in this issue. We like to publish such good news.

Have a great Spring and plan to attend the **CHLA/ABSC** Annual Conference in Winnipeg in June.

Diane Jewkes

Editor

Peter Schoenberg

Assistant Editor

A WORD FROM THE PRESIDENT

A. Ducas

Head, Science Library
University of Manitoba
Winnipeg, Manitoba

Dear Colleagues

The Board held its Winter meeting February 7-8 in Toronto, Ontario. Although the agenda for this meeting was very long, the meeting was a very rewarding one.

I am very pleased to announce that we have a new **CHLA/ABSC** Chapter. The Newfoundland and Labrador Health Libraries Association (NLHLA) applied for Chapter status earlier this year, and the Board members were unanimous in their approval. NLHLA is **CHLA/ABSC**'s seventeenth Chapter, and the Chapter that truly makes us a bi-coastal Association. The current NLHLA executive is made up of **Catherine Lawton** (President), **Linda Barnett** (Vice-President/President-Elect) and **Shirley Cooper** (Secretary/Treasurer). Congratulations to all NLHLA members; we look forward to your participation in Association activities.

I am also very pleased to announce that **Joanne Marshall**'s name was put forward and approved by the Board for the Award of Outstanding Achievement. **Joanne** has made significant contributions to the field of health sciences librarianship for more than a decade, and more recently through her ground breaking survey of hospital libraries in the Rochester region, and the proposal for Consumer Health Information Services in Ontario. Librarians across Canada have benefitted from her lectures, conference presentations and publications for a long time, and I am extremely pleased that the Association is now honouring her with this prestigious award. The presentation of the award will take place at the banquet of the annual conference in Winnipeg.

By now most of you will have received the preliminary program for the **CHLA/ABSC** Annual Conference which will be held in Winnipeg June 6 - 10. Although, as conference Co-chair and President, I have a vested interest in seeing you all there, I believe that the program being offered is timely and exciting. The continuing education courses include topics such as "Introduction to Workload Measurement for Libraries", "Successful Proposal Writing" and "Improving your Communication Skills". They compliment and enhance the program. Along with this package you received a copy of the Association's By-Laws with the proposed changes in italics. Please check the changes against the 1979 By-Laws

(published in the **Directory**) since you will be asked to ratify them at the AGM in Winnipeg.

The work of the **CHLA/ABSC** Task Force on the CHA/MIS Guidelines is quickly drawing to a close. The Task Force has completed its mandate and has put the finishing touches on its publication **"Workload Measurement Systems: A Guide for Libraries"**. Those of you who participated in the two pilot projects will notice that the name of the document has changed, and in fact so has the content. After careful review the Task Force decided that the **Guide** was applicable to all libraries and not just health care facility libraries. With the approval of the Board it was decided that the **Guide** would be marketed widely and to all libraries. The **Guide** will be available in early summer and will be sold at the Board table in Winnipeg.

Jan Greenwood and **Susan Hendricks** have also co-developed a workshop on workload measurement systems. The pilot project for this workshop took place in Kingston, Ontario in early February, and the evaluations submitted indicate that the KAHLA participants were extremely satisfied with the presentation. **Jan** will be giving this workshop in Winnipeg.

I would like to take the opportunity to comment on the outstanding work that **Janet Joyce** has been doing as the **CHLA/ABSC** representative to the CCHFA. The Association had a setback this fall when the CCHFA inexplicably made changes to previously agreed on standards. The most disappointing of the changes is the fact that CCHFA is unwilling to categorically specify a graduate degree in Library and Information Science as the qualifications of the Director of Service. I would like to thank all of the Chapter Presidents who responded to **Janet's** memo last October, and I am urging members to lobby people who might influence CCHFA to change the Standards back to what they had originally agreed on. **Janet** has represented the Association well and has put forward our views clearly and forcefully. Her complete report entitled **"Report on Health Facilities Library Service Standards"** was published in **BMC** 13(3): 160-164, 1992. **Janet** will also be giving a report of her activities at the AGM.

It is hard for me to imagine that my term of office as your president is soon going to end. I have been very fortunate this past year in having an extremely hard-working and productive Board. I would like to thank all of them for their hard work. In particular I would like to take this opportunity to express my sincere thanks and appreciation to **Catherine Quinlan** (Past President), **Linda Wilcox** (Continuing Education), **Leslie Sutherland** (Secretary) and **Diane Jewkes** (Editor of **BMC**) all of whom will be leaving the Board after the June conference. They made significant contributions to the Association, and made my year as president smooth sailing. I would also like to take this opportunity to thank **Bruna Ceccolini** on behalf of the Association. **Bruna** has been helping **CHLA/ABSC** with the publication and distribution of **BMC** and other documents for many years. Her help has been invaluable.

It has been an honour serving you as President for 1991 - 1992.

UN MOT DE LA PRESIDENTE

Ada Ducas

Chef des services de bibliothèque
Université du Manitoba
Winnipeg, Manitoba

Chers/Chères collègues,

La réunion d'hiver du Conseil a eu lieu les 7 et 8 février à Toronto, Ontario. En dépit d'un ordre du jour plutôt chargé, la réunion en a valu la peine.

Il me fait plaisir de vous annoncer l'addition d'un nouveau chapitre à l'**ABSC/CHLA**. Au début de l'année, l'Association des bibliothèques de la santé de Terre-Neuve et du Labrador (NLHLA) a sollicité le statut de chapitre, et les membres du Conseil ont approuvé cette demande à l'unanimité. NLHLA est notre dix-septième chapitre et grâce à ce chapitre nous devenons vraiment une association qui s'étend d'un littoral à l'autre. Le Conseil exécutif du NLHLA est présentement composé de **Catherine Lawton** (présidente), **Linda Barnett** (vice-présidente/présidente désignée) et **Shirley Cooper** (secrétaire/trésorière). Félicitations à tous les membres du NLHLA; nous attendons avec impatience votre participation aux activités de l'Association.

Il me fait aussi plaisir de vous annoncer que le nom de **Joanne Marshall** a été soumis pour le prix d'excellence et a recueili l'approbation du Conseil. Pour plus d'une décennie, **Joanne** a contribué d'une façon remarquable au domaine de la bibliothéconomie dans le contexte des sciences de la santé et plus récemment elle a créé de nouveaux débouchés grâce à son sondage des bibliothèques dans les hôpitaux de la région de Rochester et en formulant une proposition pour l'obtention de services de renseignements sur la santé pour les consommateurs de l'Ontario. Depuis longtemps, à travers tout le Canada, les bibliothécaires ont bénéficié de ses cours, de ses présentations lors des conférences et de ses publications, et je suis extrèmement heureuse que l'Association lui fasse honneur en lui accordant ce prix prestigieux qui lui sera présenté lors du banquet à la conférence annuelle de Winnipeg.

La plupart d'entre vous aurez déjà reçu le programme préliminaire pour la conférence annuelle de l'**ABSC/CHLA** laquelle aura lieu à Winnipeg du 6 au l0 juin. Même si comme présidente et co-animatrice de la conférence j'ai un intérêt acquis à vous y voir tous/toutes, je suis aussi certaine que ce programme sera pertinent et excitant. Les cours de perfectionnement offrent des sujets tels que "Introduction aux systèmes pour mesurer l'efficacité de l'utilisation des tâches

dans les bibliothèques/ Workload measurement for Libraries", "Comment formuler une proposition écrite réussie" et "Comment améliorer vos aptitudes de communication". Ces cours complètent et réhaussent le programme. En plus de ce cahier de documentation, vous aurez reçu un exemplaire des statuts de l'Association avec les modifications proposées, en italique. Je vous prie d'examiner les modifications en les comparant aux statuts de 1979 (publiés dans le répertoire) vu qu'on vous demandera de les ratifier à la réunion de l'Association à Winnipeg.

Le travail du groupe d'action de l'**ABSC/CHLA** concernant les lignes directrices de l'ACH/SIA (Association canadienne des hôpitaux/système d'information de l'administration/ CHA/MIS, sera bientôt achevé. Ce groupe a terminé son mandat et a mis la dernière main à sa publication **"Système pour mesurer l'efficacité de l'utilisation des diverses tâches au travail: un guide pour les bibliothèques / Workload Measurement Systems: a Guide for Libraries"**. Ceux/celles d'entre vous qui ont participé aux projets-pilotes remarqueront que le nom du document a changé et que, en fait, le contenu aussi a changé. Après une revue approfondie, le groupe d'action a décidé que le guide était applicable non seulement aux bibliothèques des soins de la santé, mais à toutes les bibliothèques. Avec l'approbation du Conseil, on a décidé que ce guide serait l'objet d'un vaste effort de marketing visant toutes les bibliothèques. Le guide sera disponible au début de l'été et sera en vente à la table des représentants du Conseil à Winnipeg.

Jan Greenwood et **Susan Hendricks** ont aussi contribué au développement d'un atelier adressant les Systèmes de mesurage des tâches au travail/ Workload measurement systems. Le projet-pilote a eu lieu à Kingston, Ontario au début de février et les participants de KAHLA ont demontré leur satisfaction par leur évaluation de la présentation. **Jan** présentera cet atelier à Winnipeg.

Je saisis l'occasion de noter le travail hors ligne accompli par **Janet Joyce** comme représentante de l'**ABSC/CHLA** auprès de la CCAEH (Commission canadienne d'accréditation des établissements hospitaliers)/ CCHFA. L'Association a connu une marge de recul l'automne dernier lorsque la CCAEH/CCHFA a fait des changements inattendus aux normes. Un des changements le plus désapointant est le fait que la CCAEH/CCHFA n'est pas disposée à spécifier d'une façon catégorique la nécessité de posséder une maîtrise en Sciences de l'information comme conditions requises au poste de directeur/directrice des services. J'aimerais remercier tous/toutes les présidents des chapitres qui ont répondu au mémo de **Janet** en octobre dernier, et j'exhorte les membres à exercer une pression auprès des personnes qui pourraient influencer la Commission pour qu'elle réinstitue les normes telles qu'acceptées au préalable. **Janet** a bien representé l'Association et a expliqué notre point de vue d'une façon claire et convaincante. Son exposé intitulé **"Rapport sur les normes des services de bibliothèque dans les établissements hospitaliers. / Report on Health Facilities Library Service Standards"**, a été publié dans le **BMC**, vol.13(3): 160-164, 1992. **Janet** donnera aussi un exposé à la réunion annuelle de l'Association.

Il est difficile pour moi de concevoir que mon mandat comme présidente sera bientôt terminé. Au cours de l'année qui s'écoule j'ai eu la bonne fortune de travailler avec des membres très diligents et très productifs. J'aimerais les remercier pour leurs efforts. En particulier, j'aimerais profiter de cette occasion pour exprimer mes sincères remerciements et mon appréciation à **Catherine Quinlan** (présidente sortante), **Linda Wilcox** (cours de perfectionnement), **Leslie Sutherland** (secrétaire) et **Diane Jewkes** (éditrice du **BMC**), toutes laisseront leur poste au Conseil après la conférence en juin. Elles ont toutes contribué d'une façon significative à l'Association et m'ont permi de naviguer en mer calme comme présidente. J'aimerais profiter aussi de cette occasion pour remercier **Bruna Ceccolini** au nom de l'Association. **Bruna** a prêté assistance à l'**ABSC/CHLA** depuis nombre d'années et a aidé à la publication et à la distribution de **BMC** et autres documents. Son assistance a été inestimable.

J'ai apprécié l'honneur de vous servir comme présidente pendant l'année 1991-1992.

Translated by: **Yolande McArthur**

CONTINUING EDUCATION

BEST REFERENCE SOURCES (CANADIAN SUPPLEMENT)

PART 2 - SURVEY RESULTS

Linda Wilcox

Director, Shared Library Services
South Huron Hospital
Exeter, Ontario

The results are in and here is the "Canadian Supplement" to the original U.S. survey conducted by N.R. Johnson, et al. which was published in **Medical Reference Services Quarterly** 1990 Winter; 9(4):43-79.

A description of the distribution and content of the survey in Canada was published in this column in the last **BMC** issue vol.13(3). The surveys were mailed out to the sixteen medical school libraries across Canada, and fifteen reference librarians responded representing ten of those sixteen institutions. MANY THANKS are extended to the fifteen reference librarians for taking the time to fill out this questionnaire during the hectic school year.

A total of 216 individual titles were listed with 122 deemed "essential", 63 listed as "gems" and 31 titles were mentioned in both categories. The survey results that follow list the titles in alphabetical order. The number of times the source was mentioned as an "essential" reference tool and/or as a "gem" is indicated for each title. This list has been updated to the most recent edition for each title. Some reference librarians chose to include the standard indexes and abstracts -- others did not. Some respondents also included very useful descriptions of how the reference tool was used. These annotations have been recorded in the computer database and if any reader is interested in learning more about the annotations submitted for a reference tool, please contact the CE Coordinator.

All ten institutions responded to the question "How do you update your reference collection?" All respondents use publisher's flyers, and nine out of ten choose items from publisher catalogues/order cards. Seven out of ten was the score for the remaining options which included: searching "Books in Print", checking databases/indexes by subject, choosing items from book vendor approval plans and using the "Brandon List". All except two institutions checked the "other" category and described using the following methods for updating their reference collections: NLM Current Catalog Proof Sheets, faculty/physician/student recommendations, journal/book reviews, Libraries' New Acquisitions publications, and reviews of new reference titles in publications such as "Key Guide to Information Sources in Paramedical Sciences".

The following list that compiles the survey results will hopefully be another "essential tool" for **BMC** readers to update their reference collections!

LIST OF ALL SUGGESTED REFERENCE TOOLS ALPHABETICALLY ARRANGED BY TITLE

E = Number of Responses indicated as "essentials"
G = Number of Responses indicated as "gems"

E	G	TITLES
1		AAMC CURRICULUM DIRECTORY. -- 19th ed. -- Washington, DC: Association of American Medical Colleges, 1990.
7		ABMS COMPENDIUM OF CERTIFIED MEDICAL SPECIALISTS / American Board of Medical Specialists. -- 3rd ed. -- Evanston, IL: ABMS, 1991.
6		ACCREDITED RESIDENCY PROGRAMS / Royal College of Physicians & Surgeons of Canada. -- Ottawa, ON: RCPSC, 1991.
1		ACRONYMS, INITIALISMS & ABBREVIATIONS DICTIONARY. -- 14th ed. -- Detroit, MI: Gale Research Co., 1990.
5		ADMISSION REQUIREMENTS TO CANADIAN FACULTIES OF MEDICINE AND THEIR SELECTION POLICIES 1991/92 & 1992/93. -- Ottawa, ON: Association of Canadian Medical Colleges, 1990.
9		AHA GUIDE TO THE HEALTH CARE FIELD / American Hospital Association. -- Chicago, IL: AHA, 1991.
2		AHFS DRUG INFORMATION. -- Bethesda, MD: American Society of Hospital Pharmacists, 1991.
2		ALLIED HEALTH EDUCATION DIRECTORY. -- 19th ed. -- Chicago, IL: American Medical Association, 1991.
1		AMERICAN DRUG INDEX. -- 35th ed. -- Philadelphia, PA: Lippincott, 1991.
1	3	AMERICAN MEDICAL ASSOCIATION FAMILY MEDICAL GUIDE / Jeffrey R.M. Kunz & J. Finkel Asher, eds. -- Rev. ed. -- New York, NY: Random House, 1987.
3		AMERICAN MEDICAL ASSOCIATION MANUAL OF STYLE / Cheryl Iverson, Chair. -- 8th ed. -- Baltimore, MD: Williams & Wilkins, 1989.
9		AMERICAN MEDICAL DIRECTORY 1990 / American Medical Association. -- 32nd ed. -- Chicago, IL: AMA, 1990. (4 vols.)
2		AMERICAN MEN AND WOMEN OF SCIENCE. -- 17th ed. -- New York, NY: Bowker, 1989. (14 vols.)
	1	AMERICAN STATISTICS INDEX / CONGRESSIONAL INFORMATION SERVICE.
1		ASSOCIATION OF ACADEMIC HEALTH CENTERS; 1991 DIRECTORY. -- Washington, DC: The Association, 1991.
1		ASSOCIATIONS CANADA 1991; AN ENCYCLOPEDIC DIRECTORY / Liba Berry. -- Toronto, ON: Canadian Almanac & Directory, 1991.
1		ATLAS OF HUMAN ANATOMY / Frank H. Netter. -- Summit, NJ: Ciba-Geigy Corp., 1989.

1 BIBLIOGRAPHY OF HEALTH CARE IN NEWFOUNDLAND / Isabel Hunter. -- St. John's, NF: Memorial University of Newfoundland, Faculty of Medicine, 1986.

1 BIOGRAPHICAL DICTIONARY OF MEDICINE / Jessica Bendiner and Elmer Bendiner. -- New York, NY: Facts on File, 1990.

1 BIOLOGY DATA BOOK / Philip L. Altman & Dorothy S. Dittmer, eds. -- 2nd ed. -- Bethesda, MD: The Federation of American Societies for Experimental Biology, 1972-1974.

1 2 BIRTH DEFECTS ENCYCLOPEDIA; THE COMPREHENSIVE SYSTEMATIC ILLUSTRATED REFERENCE SOURCE FOR THE DIAGNOSIS AND TREATMENT OF HUMAN ANOMALIES OF CLINICAL SIGNIFICANCE. -- Denver, MA: Center for Birth Defects Information/Blackwell Scientific/Year Book Medical, 1990.

4 BOOKS IN PRINT. -- 44th ed. -- New York, NY: Bowker, 1991. (8 vols.)

8 [BRITISH] MEDICAL DIRECTORY 1990. -- 147th ed. -- London, UK: Churchill Livingstone, 1991.

1 CANADA. DIRECTION GENERALE DE LA PROTECTION DE LA SANTE. DIRECTION DES MEDICAMENTS. -- Ottawa, ON: la direction générale, 1989.

1 CANADA DISEASES WEEKLY REPORT. -- Ottawa, ON: Bureau of Epidemiology, Laboratory Centre for Disease Control, Dept. of National Health and Welfare.

8 CANADA YEAR BOOK 1990 / Statistics Canada. -- Ottawa, ON: Minister of Supply and Services, 1990.

3 1 CANADIAN ALMANAC AND DIRECTORY. -- Toronto, ON: Canadian Almanac & Directory, 1991.

1 CANADIAN CANCER STATISTICS / National Cancer Institute of Canada. -- Toronto, ON: The Institute, 1991.

1 CANADIAN DIRECTORY OF FOUNDATIONS. -- 8th ed. -- Toronto, ON: Canadian Centre for Philanthropy, 1988.

1 CANADIAN DRUG IDENTIFICATION CODE. -- 17th ed. -- Ottawa, ON: Health and Welfare Canada, 1991.

2 CANADIAN HANDBOOK OF MEDICAL AND SURGICAL SPECIALISTS. -- 3rd ed. -- Don Mills, ON: Southam Business Communications, 1990.

1 CANADIAN HEALTH SYSTEM / Lee Soderstrom. -- London, UK: Croom Helm, 1978.

14 CANADIAN HOSPITAL DIRECTORY/ANNUAIRE DES HOPITAUX DU CANADA 1991-1992. -- Ottawa, ON: Canadian Hospital Association, 1991.

2 1 CANADIAN IMMUNIZATION GUIDE / text prepared by the National Advisory Committee on Immunization. -- 3rd ed. -- Ottawa, ON: Health and Welfare Canada, 1989.

1 CANADIAN LIBRARY YEARBOOK. -- 5th ed. -- Toronto, ON: Micromedia Ltd., 1990.

4 CANADIAN LOCATIONS OF JOURNALS INDEXED FOR MEDLINE / Canada Institute for Scientific and Technical Information. -- Ottawa, ON: CISTI, 1990.

2 CANADIAN MEDICAL ASSOCIATION'S GUIDE TO PRESCRIPTION AND OVER-THE-COUNTER DRUGS. -- Montreal, PQ: Reader's Digest Association, 1990.

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PHYSICIAN USE OF LIBRARY-RELATED SOFTWARE

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INTRODUCTION

University Hospital (UH) in London, Ontario, is a 350-bed acute care, teaching hospital. Like most hospital libraries, the Library Services department undertakes activities and provides services for which microcomputers and commercially available software can be used. These are primarily in the areas of online searching, CD-ROM searching, citation/reprint management, and current awareness. For most hospital libraries, these applications require significant staff, capital and operating resources to implement. At the same time, however, these same applications and others like them are being purchased and implemented by growing numbers of individual physicians and by other departments. Should hospital libraries view this as a threat or an opportunity? To facilitate departmental planning, and to provide a clearer picture of how the Library Services department might provide and/or support these applications, we wanted a more precise idea of the magnitude of this usage.

THE SURVEY

To accomplish this, we created a survey to provide data that would help us answer the following questions:

1. How many medical staff are using microcomputers and what is the prevalence of the use of library-related applications as opposed to other standard applications?

2. Which databases and bibliographic services are they using and which front-end software packages are they using to access these databases?

3. What interest is there in making Library Services online public access catalogue (OPAC) available to remote users?

4. Should Library Services purchase, promote, and support particular software packages for citation/reference management and current awareness?

5. What are the instructional needs of staff in these areas and is it feasible for Library Services to provide it?

We developed a 4-page questionnaire and had it reviewed by a consultant from the hospital's Educational Services Department. The final document consisted of 12 questions dealing with the following topics: hardware and software (2 questions); database searching (4); reprint management (2); current awareness (3); and educational needs (1). We designed it so that we could easily quantify the results and, where appropriate, provided space for respondents to give more elaborate answers. We used a booklet format, a legal-size sheet of paper folded in half, and numbered the questionnaires so that non-responding physicians could be identified for follow-up and also to permit stratifying the data if necessary or useful. We sent the questionnaire to 142 physicians and 80 residents, as well as 30 non-medical administrative staff (e.g. lab managers, nursing managers, etc). One month after distribution, we sent notices to those who had not yet responded. Two weeks after that, if a questionnaire still had not been returned, one phone call was made to encourage doing so.

FINDINGS

Questionnaire return rates were as follows: 72 of 142 physicians (51%), 8 of 80 residents (10%), and 22 of 30 administrative staff (73%). Because the response from residents was so low, and because the use of library-related software by administrative staff was low, we are only reporting on the responses from the physician questionnaires here.

Microcomputer use and applications: 94% of responding physicians use microcomputers. Of those using microcomputers, 43% have modems. As could be expected, word processing is the most common application, but this was followed by online searching, reprint management and database management, all library-related applications (Figure 1).

Medline searching - 90% of respondents search Medline. Over half of these (51%) do at least some of their own computerized literature searching (Figure 2). Grateful Med was the most common means for these end-users to search Medline, followed by CD-ROM, MEDLARS, and PaperChase (Figure 3).

OPAC access - 57% of respondents would like to have access to UH's OPAC via their microcomputers or via the hospital mainframe.

Citation/reprint management - 93% of respondents keep personal or departmental reprint collections. Of these, 34% use Reference Manager to manage the collections, 52% use a manual filing system, and 14% use a variety of software products.

Current awareness products - 58% of respondents stated that they did not make use of a current awareness product such as Current Contents or Reference Update. 52% stated that they would use a library copy of one of these products if the library

subscribed. 32% stated that they would pay to have Library Services provide them with tables of contents from such a product, and 57% stated that they would pay to have SDI searches done as part of a current awareness service.

Educational needs - Respondents expressed interest in learning more about at least four kinds of software, with Reference Manager and Grateful Med leading the way (Figure 4). In terms of the format of delivery of that instruction, responding physicians preferred printed handouts (74%), followed by individual instruction (47%), group instruction (44%), and finally instruction by computerized tutorial (22%).

DISCUSSION

At 51%, the return rate for the questionnaire does not make it possible to generalize with any certainty about the entire population of UH physicians, let alone to make assumptions about microcomputer usage by physicians in other hospitals. Whether they are generalizable or not, however, the numbers do represent large enough groups of UH library users to be considered seriously in departmental planning, and we have since based a number of planning decisions on them. In addition, many other health sciences libraries can probably recognize similar trends, or are grappling with some of the same issues raised here. For this reason, it is our hope that a few inferences may be drawn from our experience that could be of use elsewhere.

The figures for microcomputer use and library-related applications correspond very closely to projected results indicated by similar physician surveys performed by **Haynes et al.** (1987, 1991) at McMaster Health Sciences Library. At UH, the large number of computer users and the prevalent use of library-related software among physicians warrant a continuing Library Services commitment. The numbers have been used, with some success, to lend additional weight to capital equipment requests (i.e. computer hardware) for the department, and to being included in the systems development planning processes in our institution.

The figures obtained for end-user searching allowed us to confirm and quantify, in our own setting, the well-documented trend to end-user searching of Medline by physicians. Our declining statistics for mediated searches, and the burgeoning numbers of end-user searches being done on our CD-ROM workstation (mostly by residents) told us that this was probably the case, but the survey enabled us to confirm it and to see to what extent Grateful Med is used for that purpose. For a variety of logistical reasons, we don't offer end-user searching on Grateful Med, but we can see that with almost 40% of respondents using Grateful Med now, it is probably a service that would be well-received. With 40% of respondents also indicating they would like instruction in Grateful Med, we have decided to support this trend by offering fee-based, group courses in Grateful Med.

A note should be made here about the relatively poor ranking of CD-ROM as an access point to Medline (Figure 3). Resident response to the survey was very poor. From direct observation of the CD-ROM workstation we know that residents constitute the largest single group of CD-ROM users in our library. Not being able to

include residents probably skews the results of our survey, making Grateful Med seem more important as a Medline access point for physicians in our hospital than CD-ROM. In all likelihood the reverse is probably true, though we have no data to support this assumption. Nonetheless, we have decided to offer group instruction in CD-ROM searching. We hope that in so doing we will be able to reduce some of the one-on-one instruction in CD-ROM searching that is now required in the library. We can probably anticipate that residents will be our primary audience.

Anybody who has implemented an OPAC or a CD-ROM workstation in their library has probably already discovered that now they have to spend a lot of time telling people how it works. A true discovery for us in the survey, however, was the potential for growth that exists in the area of citation management. It would seem that many physicians with the capacity to computerize their reprint filing systems are using a manual system instead. We anticipate that this will change over the next few years. Respondents also clearly indicated a need for instruction in one particular software package for citation management, Reference Manager. To support this, we have decided to provide a number of library instruction options. We have loaded a computer tutorial in Reference Manager, as well as a working copy of Reference Manager on our Computer Learning Centre workstation in the library. In addition, we will be offering periodic, fee-based, group courses in Reference Manager with an emphasis on how to use CD-ROM Medline and Reference Manager to convert paper reprint collections into searchable subject-specific databases.

Finally, in the area of current awareness, the survey has provided us with the data that supports restructuring our current awareness services. Respondents are definitely interested not only in having a computerized current awareness service available in the library, but also in having Library Services provide fee-based current awareness services. To this end, we have purchased the clinical medicine section of Current Contents on Disk for loading on our CD-ROM workstation. In addition, we are involved in marketing a table-of-contents service and an SDI service aimed specifically at physicians.

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Figure 1
Software use by physicians

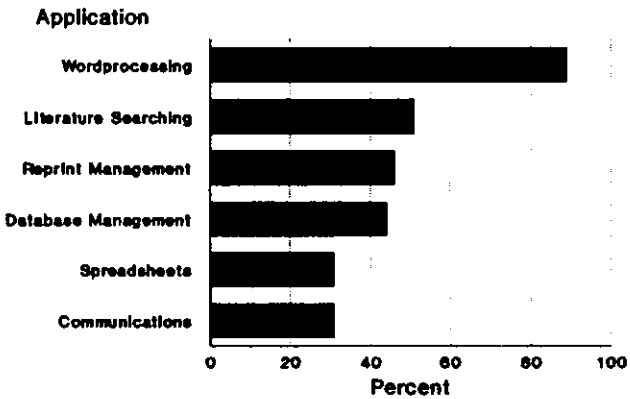


Figure 2
How physicians search Medline

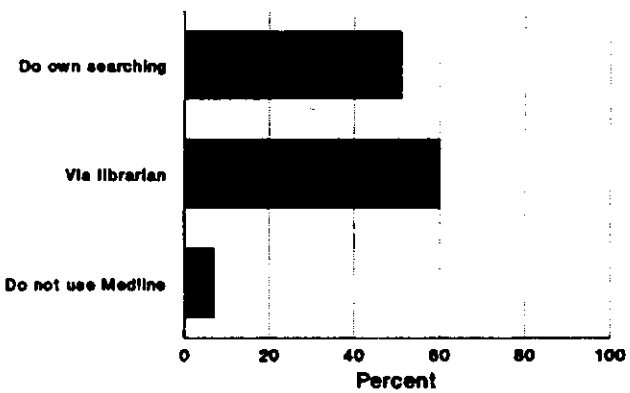


Figure 3
Enduser searching on Medline

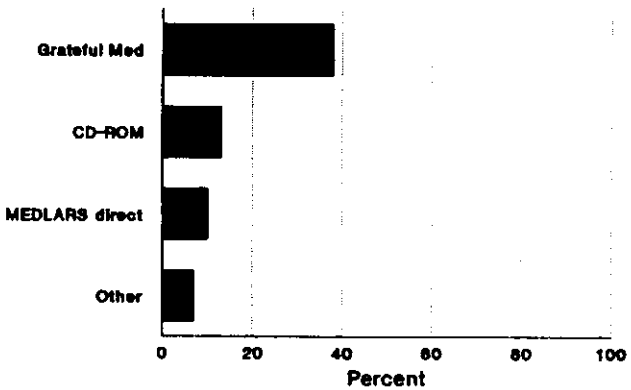
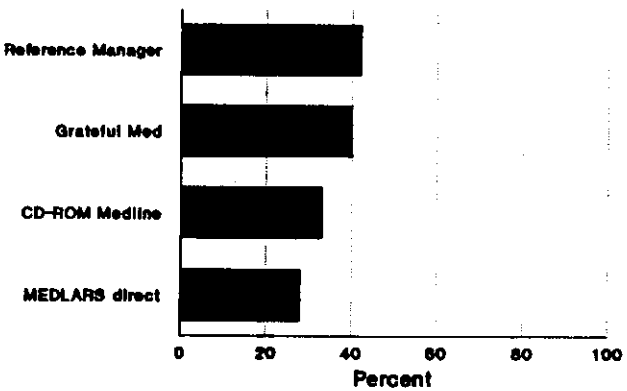


Figure 4
Physician education needs



CONSIDERING THE USER : AN INTRODUCTION TO PREPARING END-USER TRAINING FOR LIBRARIANS IN SMALL HEALTH SCIENCE SETTINGS.

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ABSTRACT:

As technology becomes a greater and greater part of a patron's regular library use, the need to train patrons becomes a greater and more frequent challenge. Many librarians have limited time, resources and expertise with which to approach this challenge. Good instruction requires a balancing of user needs with subject content, teaching skills, and resources. This article suggests a process for analyzing these factors and designing an instruction session.

RESUME:

Comme la technologie est de plus en plus une partie intégrante des bibliothèques, la nécessité d'instruire les habitués devient un défi plus fréquent et plus important. Plusieurs bibliothécaires doivent relever ce défi en dépit d'un horaire chargé, et de ressources et de connaissances limitées. Pour donner une bonne instruction, on doit balancer le besoin des usagers avec les matières en question, les capacités de l'instructeur et les ressources disponibles. Cet article suggère un processus pour analyser ces facteurs et créer un modèle de séance d'instruction.

(Résumé by Yolande McArthur)

INTRODUCTION:

As information sources and technologies continue to proliferate, and as the emphasis shifts from mediated searches to end-user searching, librarians find themselves not only with more and more to learn, but also with more and more to teach. Complexity is added by the variety of users and their literacy levels in English, as well as in libraries and computers. As librarians with a wide range of responsibilities, it is often a challenge to find the time and concentration needed to master the ever changing technologies and systems that must be used and taught.

* This paper is based on a poster session presented at the UNYOC Annual Meeting, October 2 - 5, 1991.

Additional time would be needed to read the literature on library instruction, adult education etc., and to master teaching skills that were not part of our training.[1,2]

Despite these difficulties it is essential that we do teach our patrons to use our OPACs and CD-ROM products, and other systems that they can access,[3] and that we encourage efficient and accurate use of these resources in order to avoid poor quality searches and the consequent misinformation.[4] In the reference interview we are used to questioning the user to find out their information needs. As teachers we must not only determine information needs, but also determine how the information should be delivered and the success of that delivery. With library technology (and bibliographic instruction) our responsibility is not only to put information in patrons hands, but also to put knowledge into their heads.

> "The learning process is still something of a mystery. It is a little "black box". Much goes on inside of it. ... But we do not know exactly what is happening ... The learning process... remains a whole series of quite personalized responses. **There is no substitute for a good student, a good teacher, and a mutually interesting subject."**[5]

It is, therefore, important that we add teaching to our list of skills. For those in situations where support and resources for this are scarce, the following sections will provide some hints on approaching end-user training from a teacher's perspective.

The best teaching is tailored to the student, the subject and the teacher involved. This is referred to as "individualized instruction" or "II". In order to do this you have to examine these three factors, the student, the subject and yourself, the teacher, as well as the resources available.

THE STUDENT:

Users will vary in their educational background, motivation and learning styles as well as their prior knowledge and current needs.

> "Planning for or adapting to the seemingly endless variety of learner characteristics is probably the most difficult task faced by the instructor of adults. ... If a general rule were to be stated, it would be that a variety of methods, and materials should be planned so that different individuals with different preferences and abilities would feel satisfied with some aspects of the situation."[6]

Learn about your students. Ask questions to determine their needs, wants, interests and abilities regarding the system.

There are many styles of learning, and many types of computer users, ranging from novice to hacker. I have found that end users will often fall into one of four categories:

1. Key strokes only. These users are fearful of breaking the computer and want to be taught only the exact keystrokes to do what they must. "Hand holding" may be needed here. These users are often very

hesitant to use help screens, manuals etc. They want you there. They are convinced that they can never learn to understand "those darned machines" and may be unwilling to try. It takes patience to break this barrier.

2. Key strokes first. These users are hesitant about computers and want the reassurance of knowing specific sequences to do specific things. Once these are mastered they will begin to learn concepts. They may over generalize and try to use commands from one program in another program.

3. Concepts first. These users need to understand first. You may have to do a lot of explaining and demonstrating, but once the concept is learned it will not be forgotten. The users will be happy to use manuals, cheat sheets etc. to find specific key strokes after the initial training.

4. Concepts only. These users prefer to learn the details on their own, often through trial and error. They will master the concepts quickly and then muddle through the key strokes. Reading the instructions is often a last resort. After the initial stages they will be eager for "tips, tricks and traps".

The type 3 user is easier to train, with 1 and 4 being equally difficult. Individual users' "categories" may vary according to their personality, motivation and their familiarity with the concepts or tasks in question

Despite these variables you will find some consistency in your users. They are usually intelligent, well educated adults who have chosen to pursue this topic. "Adults are motivated to learn as they experience needs and interests learning will satisfy".[7] They are, usually, good students. They are busy, and scheduling is often difficult. In addition to some background knowledge they may have preconceived ideas about what, and how much they need to learn, and a definite style of approaching that task.

You will learn about your users as students through prior knowledge of their personality as users, by asking questions when scheduling a session (what do they want to learn and why), through discussions at the beginning of a session and by observing them closely throughout the training. It is important to read and to react to non-verbal signs of confidence, confusion, comfort, interest or overload as well as to respond to questions.

THE SUBJECT:

Learn the technology as well as possible. If you are not comfortable with the subject matter you will not be able to teach it. For example, when teaching a CD-ROM database application you need to know the concepts of database creation, searching and retrieval; as well as the structure, design and content of the database in question. You will need a basic level of computer literacy, knowledge of your particular system, its operating system and trouble shooting of the hardware. (It can ruin an instruction session if you stop to read the manual for 5-10 minutes.) You must also know the capabilities and limitations of your given software program as well as the commands and shortcuts.

Review similar programs. Comparisons will help you understand and appreciate the system that you have. They will also help when dealing with users experienced with other systems. Learn the interacting technologies and programs such as the communications settings and common programs used in accessing dial-in systems, or the downloading or uploading requirements when transferring data to database or word processing applications.

Finally , know the subject in layman's terms to help you teach it, and in jargon to help you discuss it with computer experts and other users. Explaining jargonized concepts in plain English is often a good test of your understanding of the concepts.

Once you have learned this you will need to analyze and structure the knowledge. There should be a logical order and flow to the learning. For each point, consider what the learner will have to know and understand already in order to understand the new point. Then put the points in order from the bottom up. In the simplest outline structure you will have a triangle with broad general knowledge on the top stepping up through computer, research and library literacy, to CD-ROM and database knowledge, to your particular application and to specific uses of that application (Figure 1).

You will probably need to create a more detailed structure with various branches and interconnections. With each lesson and user you will be able to choose which branches to take, how far to follow them and which connections to make. This process can be time consuming the first few times you do it, but you will find it well worthwhile as it will improve your understanding of the subject matter, as well as the quality and the flexibility of your teaching.

THE TEACHER:

Think about the organizational and communication skills that you have and also about your personal preferences. You may find that some of your skills need polishing. Think about the communication skills and styles of any speakers or teachers you particularly admire (or dislike). When you attend workshops or lectures, think about how the material was organized and presented and whether it was effective. ALA has published a useful collection of case studies.[8] But, most of all, practise, practise, practise.

Developing teaching expertise should be a dynamic process. Think about your success and about the outcomes your learners have with what you have taught. Listen to yourself for repetitions and stumbles, try new ideas, and most importantly consider all feedback whether it is formal, conversational or nonverbal. If you are individualizing for your learners, revising for quality, and updating for system changes you will probably find that no two sessions are ever identical.

THE RESOURCES:

There are often more resources in theory than in practice. The use of technology and the support of other departments or outside services, such as graphic artists or printers are contingent upon the basic resources of time and money. In addition to these you will also need to consider your resources of space, equipment and skill.

You will need to consider the amount of time you have to prepare, the amount of time needed to cover the subject, the time available to teach in and the schedules of both teacher and learner. When considering the length of your programme, remember that schedules, attention span and information overload tend toward a rule of thumb of under one hour.

You may teach in a classroom, a meeting room, a computer lab or at your library workstation itself. It is important to match the size of the room to the size of the group. Half a dozen people in a large lecture hall can be as difficult as an overcrowded office. The size of the room, and of the audience also affects the equipment needed and the teaching method used. Hands-on practice in a classroom with thirty students requires a special equipment set-up. A permanent space where you can use the walls for display, leave your equipment set up and do not have to compete with other users is ideal. For nervous users, training at the workstation they will be using when they search helps reduce their anxiety. If it is possible, training in the library is often the most convenient and user-friendly option.

Skills and equipment often go hand in hand. Consider what you have, such as a PC, what you can reliably borrow, such as an overhead projector, what you can make, and what you can buy. I strongly recommend a graphics program which will give you independence and flexibility in making posters and hand-outs and speed up the process of getting slides and transparencies.

You may wish to use hypertext programs, videos or printed manuals to create ways that users can learn independently. For a good discussion of hypertext and other new technologies as teaching aids see part 3 of **Hugh Fleming's** User Education in Academic Libraries.[9]

THE LESSON:

To assemble all these factors and possibilities into an instruction session begin with the user's needs. Establish who the users are and what their wants and needs from the system are. Then determine what they need to know in order to achieve this. Now go back to the framework or structure of the subject that you created earlier, and eliminate everything this user, or group, does not need to know. For example, if the user does not have access to any other computer, information on downloading may be irrelevant. Mention the concept for future reference, but skip the details.

> "Perhaps by the nature of their work, librarians and information workers too often search for completeness, and this is too often reflected in their programmes of information skills. Consideration of the user's needs and everyone's aims and objectives may mean an apparently lop-sided programme but it will be relevant and that is the motivation the user needs in any teaching programme."[10]

Next, look at what the user already knows. Some of their knowledge will overlap items on your structure. Eliminate these

points. Some of it you will be able to use as a point of reference to tie into new concepts. For example, a MAC user may need to be shown how selection by icon is replaced by selection from a menu by highlighting or initial letter on a PC. What remains of the structure is what you will be teaching this user (or group). If the amount to be learned is too great, divide it into two sessions, or encourage users to take other training, perhaps an introduction to computers or a library orientation session.

The next step is to select your location, group size and teaching method. A small group with a combination of demonstration and hands on practice seems to be the ideal, if you have enough time and equipment. The next step is to consider the learning styles of the users in relation to the knowledge they need. It is easiest to work with a group whose needs, knowledge and learning styles are similar. You will find it helpful to have a variety of user aids prepared to give you the necessary flexibility to accommodate user differences. Reference cards with common commands or key strokes, posters for frequently reviewed concepts ("explode" is a good example.) written instructions for advanced options and /or independent users, practice exercises for nervous users, on-line tutorials as refreshers for occasional users, hand-outs for those who like to take notes, and so on. Be prepared to alter these frequently as the information, technology and your ideas change.

Now write a script or an outline for your teaching. Begin with the points to be learned, in order. Then add explanations and alternative explanations and analogies where possible. Next go through and add appropriate examples. Then go through and add interconnections and cross references between the points (and to and from the users given knowledge). Now add reminders to yourself such as "show overhead here" or "eye contact, smile" .

End your outline and your presentation with a means of feedback and evaluation. This may be a questionnaire to be completed after the session or after the student's first independent search. With individuals and small groups you can encourage conversations and offer to review their first few independent search strategies. Use this feedback to revise and plan subsequent sessions.

Rehearse your script, with an audience if possible. Learn it as well as you can, trying different examples and possibilities. Finally check the room and the equipment and make sure you have all your hand-outs or whatever you choose to use, and go for it! It gets easier and better every time.

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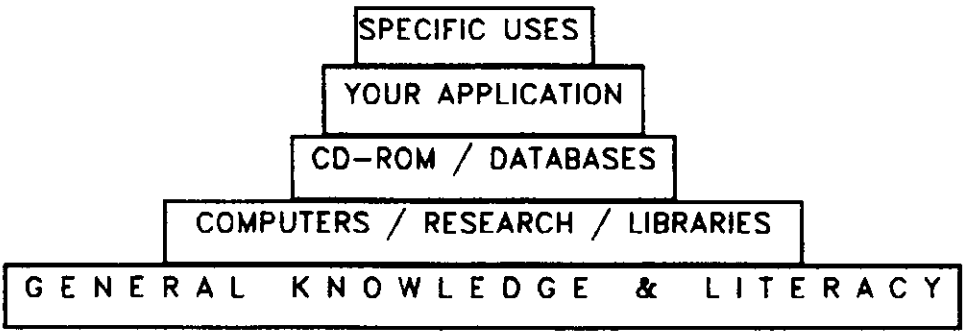
FIGURE 1



NOTE !

The following three papers were submitted by the participants in a 3-part panel discussion on interlibrary loans presented by **THLA** on February 10, 1992.

John Jackson	Tricks of the Trade
Elizabeth Reid	Fees for Service (ILLs for love or money?)
Kent Weaver	Current and Future Technologies

credibility with them, and having a reasonable knowledge of the collections in other institutions. Occasionally it is necessary to pull a rabbit from the hat.

Experienced ILL staff are always vigilant for new tools and techniques. Opportunities for continuing education, skills upgrading, and meeting with others doing similar work need to be seized. Even if solutions are elusive, it can be therapeutic to realize the commonality of problems.

IV. CONCLUSION

If we accept that ILL is a very important component in the operation of our libraries, it follows that we should strive to conduct ILL at the highest possible level of service and efficiency. To accomplish this, administrators must provide tools, equipment, and training. They must also foster continuing education opportunities and encourage networking. At the level towards which we are working, the conduct of ILL cannot be seen as an entry level position responsibility.

Increased volume can be managed effectively with electronic tools but increased volume can also be streamlined through effective user education. Clear statements of services offered, frank statements of potential problems, and realistic estimates of turn-around times, will all help to control volume.

At last we see that there is really no trick to ILL at all, merely the rising to the daily challenge to be the best at what we do.

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INTERLIBRARY LOANS: FEES FOR SERVICE

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INTRODUCTION

There are obviously advantages and disadvantages to having fees for interlibrary loan service in a hospital library. This paper will focus on the actual or potential advantages, based on experiences at our library over the last two years. Some of the well known disadvantages will be covered with a view towards minimizing those disadvantages and putting oneself at more of an advantage. My purpose is to provide some tips for those people who would like to implement fees in the least disruptive ways possible.

EXAMPLE MOTIVATING FACTORS

I hope that my comments are seen to be unbiased with respect to the "issue" of charging or not charging for interlibrary loans. The library at Toronto Western started charging because the library at Toronto General had implemented such a policy in the previous fiscal year, after a long planning stage. Over the past two years, these libraries have established common policies subsequent to the merger of the Toronto General Hospital and Toronto Western Hospital to form The Toronto Hospital in 1986. One of the major motivating factors at Toronto General was a very high interlibrary loan request load at the time that our primary backup library, the University of Toronto Science and Medicine Library, changed its policy to a non-circulating journal collection with photocopy charges. This factor was not critical at Toronto Western. However, we had new expenses to "absorb" too: we had to fund membership fees for the new Health Science Information Consortium of Toronto using existing expense or revenue lines of the budget.

SOME ADVANTAGES

A policy of charging for interlibrary loans enhances your internal cost control mechanisms. You are in a better position to adapt to changes in external charges that impact on your service. Spreading the expense broadly makes it easier to pay for the "central" service: more can pay a smaller unit cost. Decentralized control of costs exists in other hospital departments, thus

* This paper is based on a presentation given as part of a THLA Panel Discussion on Interlibrary Loans, February 10, 1992.

you should not be perceived as being "out of line" to charge in this manner. With revenue as well as expense accounts, you increase the flexibility of decisions for future budget preparations or commitments.

Teaching hospital libraries have a number of distinct user groups who make varying demands on the library and have varying resources to contribute. For example, undergraduate and postgraduate medical students are supported by medical education budgets. Research investigators and their many associates often have research grants. Medical staff may utilized hospital cost centre accounts or special group practice accounts. Some staff should be paying personally for hospital services or supplies. Thus the charge for the interlibrary loan will go to different types of budgets, not just the hospital global budget. This is another area of internal cost control for the hospital, to which the library is contributing.

New revenue allows you to raise the quality of your interlibrary loan service. For example, you can increase turnaround time by making greater use of electronic mail, fax, courier delivery or online verification of requests. Because you are documenting the interlibrary loan service for charging purposes, you will automatically keep better track of workload, monitor quality more closely, and produce new reports. Such changes show that continuous quality improvement is in place for this important service.

Staff time can be utilized to fill requests more appropriately. The presence of charges does reduce the number of "unauthorized" requests. Some requests are really unneeded and their numbers will decrease. For example, we spend much less time returning unclaimed materials or placing second and third pick up calls for requesters who no longer appear to require their interlibrary loans. The time is available to handle rush requests or to handle complex time consuming requests. Time is also available to do the billing!

There is an increased recognition of the value of our interlibrary loan service - by library staff, by our clients, and by administration. We know our service well and we can tell anyone exactly what they are paying for. Different user groups will respond in varying ways to the implementation of charges. We are motivated to better understand their needs and to see what we can both do to work together to everyone's benefit. We remind people that we are not trying to simply increase revenue (at their expense), that in fact we wish to decrease the number of titles borrowed many times a month and raise the quality of our own collection. We can make better selection decisions from our current interlibrary loan statistical surveys.

One must be fully prepared for a new charging policy -- have valid reasons for charging and communicate those reasons effectively to all concerned, have thought about the disadvantages and established action plans to eliminate or minimize them, have carefully planned the implementation of charges, and have mechanisms in place to evaluate the results of the change to ensure that the overall effect is positive for all hospital staff and students.

SOME DISADVANTAGES

I have heard people say, "it takes more time than it's worth," when considering the practice of charging for interlibrary loans. This is perhaps an assumption that can be made by both the libraries with a very large number of interlibrary loan requests and one-person libraries with a relatively small number of interlibrary loan requests. If this train of thought is used, the tendency will be to stop before you have given yourself a chance to adequately review the service needs. You need to investigate the case for or against, read some literature on the subject, and speak to colleagues. In other words, you put yourself at a disadvantage if you do not try to look for and promote possible advantages.

Expect a decrease in the number of interlibrary loan requests. Does this mean that there is decreased access for the service? Do people's unwillingness to pay (initially) mean that they cannot pay and are being cut off? Not necessarily. Cost centre accounts should cover the vast majority of your regular clientele's expenses. Most functional units will experience a very small impact on their overall budgets. Some department heads will be interested to learn the extent of use of the library by their staff, for interlibrary loan purposes. Some library users will decide that they should be paying personally for certain types of loans. Others may make alternate arrangements to obtain loans, perhaps because they may not appreciate the value and convenience of the service. It is our job to educate our potential users, marketing our service as needed.

Clientele dissatisfaction will occur initially, although not everyone will perceive the policy change to be unreasonable. Everyone must understand the purpose for charging and the advantages it will have in terms of the service we can offer. It is useful to point out other services that have charges for similar reasons. If there are no other paid services that individuals access, they may be less than willing to cooperate initially. Sometimes the charges are transparent to them; this could be the case for library charges, depending on the payment mechanism used by the individual's department. Psychologically, it is helpful to have more than one level of charges. We charge a basic transaction fee ($1.50), then pass on the actual loan charges from the lending library. We do not charge to borrow materials or rush fax items between the Toronto Western and Toronto General libraries.

Library staff dissatisfaction should not be overlooked. Basically, you and your staff need to be sold on the overall positive value this service charging policy will have in support of your library's mission. The more library staff know and understand the background about the policy, the more they can educate the library clientele. Subsequently, library staff and clientele will be able to provide better feedback so that improvements can be made as soon as possible.

If you cannot obtain the cooperation of "key players" you will certainly start out with a serious disadvantage when you attempt to smoothly implement the charges. In our hospital, the policy change was discussed with staff in such areas as Library Advisory Committee, Medical Education, Medical Administration, the Medical Advisory Committee (MAC), Research Administration, Finance, and hospital Department Heads. The policy must clearly support

hospital-wide goals and objectives. It is important to obtain documented commitments in some areas (e.g., MAC, Finance).

The billing process need not become a burden or critical factor in the decision to charge for thousands of interlibrary loan requests. Billing conducted by library staff does not necessarily have to involve "invoicing" and it does not have to be done "manually". You must comply with the needs of your Finance department. As time goes by, billing procedures get easier and faster. The goal is to fully integrate the process into regular routines.

EXAMPLE BILLING PROCEDURES

We send all our billing information to General Accounting. We were told that we must bill on a "cash or account" basis. By account, they really mean "cost centre account". We definitely have library clientele who do not have access to a cost centre account, do not have convenient access, or do not want to pay cash each time they come to pick up their interlibrary loans. It is hospital policy that departments not do their own invoicing. Therefore, after some investigation, we were able to establish a routine whereby we assigned a "receivables" or "asset" account number: in essence setting up an invoicing process. Our adaptation to the requirements of General Accounting is a procedure whereby frequent small charges are batched when invoicing is required; the trade off for us is that we receive our revenue up front and someone else does any necessary follow-up to obtain payment.

We have changed our Interlibrary Loan forms to take billing information and we keep an "authority file" of cost centre numbers for some of our regular customers who have authorized us to assign these numbers. Then every four week accounting period, we group requests by requester and input the billing information into a computer database program (dBASE at Toronto Western, LOTUS at Toronto General). General Accounting only wants to see a list of accounts, department names (to verify correct account numbers), billing names (if receivables account number) and total cost per account number (and billing name, if applicable). Another stipulation from General Accounting is the requirement for back up documentation for all transactions. That documentation is kept in the Library, thus we are the official source for any follow-up queries to Finance regarding library service debits appearing on a department's financial report. We create a detailed report at the individual requester level, which, when consulted (which is rare), should prevent us from having to go to the original interlibrary loan form. The database files can be combined together if we wish to look at all the billings going to certain departments, billing names, requesters, etc.

SUMMARY

I hope that my comments and experiences outlined above have aided in the decision making process needed when considering charging for interlibrary loans. I reemphasize that my purpose has been to concentrate on the advantages. I have not attempted to cover the general theories or issues of fee for service. This paper discusses the experiences at a teaching hospital library where the working environment demands increasingly effective control of <u>all</u> resources and continuously improving quality of services provided.

THE NEW TECHNOLOGIES - THE RIGHT QUESTIONS: "COMPUTERS ARE USELESS ..."

Kent Weaver

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INTRODUCTION

The following essay is derived from speaking notes which were the basis for a brief address given to the THLA Panel on ILLs on February 10, 1992. My mandate was to discuss the "new technologies" as applied to Document Delivery/ILL and to "feel free to make wild guesses". The presentation was intended to challenge and to provoke and, as a means to that end, took certain liberties. In an attempt to retain some of the spirit of that address, I have continued to take those same liberties in this paper.

In light of adopting this mildly cavalier posture, there are two disclaimers which should be stated at the outset. What follows are, for the most part, my personal views and do not reflect the opinions of either my colleagues or my employer (or, to put it another way, "no one else would have them"). Secondly, I do not necessarily endorse 100 % of what follows - but I will leave it up to you to decide where I am trying to play the Devil's Advocate.

My point of departure is a quotation from **Pablo Picasso**, who is reported to have declared: "Computers are useless: they can only give you answers." All of which suggests, that in order to be useful, this essay must pose some of the right questions.

What, then, are the "Right Questions"? There are any number of questions one could pose. This essay will be structured, building the framework suggested by **McGibbon**, by posing the following questions and attempting some speculative answers:

1) What are the emerging technologies of the 1990s?
2) Which of these technologies are most relevant to Document Delivery/ILL?
3) What are the key issues in their implementation?
4) What if these have not been the "right questions"?
5) What will be the emerging technologies at the beginning of the millennium?

* This paper is based on a presentation given as part of a THLA Panel Discussion on Interlibrary Loans, February 10, 1992.

1) What are the emerging technologies of the 1990s?

If we accept the argument that it can take anywhere from 5 to 10 years for a new technology to go from conceptualization to becoming a viable product or service, then presumably many of the emerging technologies of this decade can already be identified (i.e. they have emerged). The following, for example, may be enumerated:

5th Generation Software
Cooperative Processing
Cost/Performance/Size Improvements for Computer Processing and Storage Improvements
Expert Systems
High Speed Networks
Image Processing
Multimedia/Electronic Publishing
Voice Processing
Wireless Systems

2) Which of these technologies are most relevant to libraries and especially to Document Delivery/ILL?

Although all of these technologies have relevance to Document Delivery/ILL and it is becoming increasingly difficult to treat them in isolation, three topics will be highlighted: Multimedia/Electronic Publishing; Image Processing; and High Speed Networks. The selection is very arbitrary and the rationale for these decisions can be discussed later.

2-i) Multimedia/Electronic Publishing

The combination of audio, powerful computers, Desk Top Publishing (DTP) software, graphics, laser printers, optical storage devices and high resolution video monitors has resulted in exciting new ways to present information. There is now an ever-burgeoning number of articles, papers and studies available in electronic form. Text, graphs, and pictures are in digital form - ready to be printed, ready to be transmitted over networks (more about that below), or ready to be manipulated and merged with other digitalized sources (I won't even touch on the copyright implications which this prospect raises).

Many of these sources will only be available in electronic journals. The ease and cost of access to these journals is one issue which will determine library subscriptions and the document delivery role. A number of journals will only be available through commercial vendors, such as BRS. Individuals will be able to subscribe directly to some electronic journals. Just last week I subscribed to an electronic journal - **"Issues in Science and Technology Librarianship"**. It took me two minutes to subscribe, the premier issue arrived within two hours and I did not even have to join the responsible Association to get a free subscription.

This digital cornucopia will lead to the printing of single copies, on-demand publishing and print-to-order capabilities. But will this be done by the Library, through the Library or by-pass the Library altogether?

2-ii) Image Processing

Image processing, including OCR (Optical Character Recognition) and scanning, is a means whereby printed information is put into a digital format. I want to mention two technologies, namely Adonis and Ariel, in particular.

ADONIS

You may be aware that there is a custom in European documentation projects of adopting the names of Greek and Roman gods. There is "**Adonis**" and I will be discussing "Apollo" shortly. This still leaves Aphrodite (Venus), Ares (Mars), Hephaestus (Vulcan), Hera (Juno), Hermes (Mercury), Pallas Athene (Minerva) and Zeus (Jupiter), to enumerate just a few, if any reader wishes to start a new project.

Adonis initially provided text from 219 (soon to go to 400 or more) biomedical journals, including articles, abstracts, editorials, letters and other items of editorial interest on CD-ROM. Trials in Europe, in the later 1980s, indicate that Adonis will provide better quality copies at a lower price than photocopying.

The University of Toronto Library is considering a subscription to Adonis - a one-year subscription costs 22,000 Dutch guilders. There are a number of factors to be taken into account, which raise questions such as how often will it be updated; how much time will it take to find documents using the retrieval software; will subscriptions to paper copy be dropped or is this an ongoing, additional expense; and what about jukebox and network configurations? The big question - and I will come to my answer in a moment - is whether or not Adonis is a viable, long-term technology or a transitional state of the art development.

ARIEL

Ariel is a document transmission system developed by the Research Libraries Group (RLG). This system combines scanners, printers, PCs, Internet capabilities and RLG's software. It allows a library to scan an article, transmit a digital (including graphics) copy via the Internet, and then produce a high quality printout at the other end (assuming compatible software and printers).

Again, the University of Toronto Library is looking at the feasibility of Ariel. Some of the technical and economic questions raised with Adonis are applicable here. Other questions include how many times will a document have to be scanned to get it right (contrast can be very tricky) and should scanned items be transferred to optical storage to obviate subsequent scanning (and at what point does this duplicate Adonis)? Again, the big question is whether or not Ariel is a long-term approach or a transient technology.

2-iii) High Speed Networks

Networks could easily be an entire presentation in and of themselves. I am going to ignore such acronyms as local FDDI (Fiber Distribution Data Interface), LAN, MAN, SONET (Synchronous Optical Network) and T1 (1.5 MBPS [Mega-bits per second]) in favour of such acronyms as OSI and TCP/IP; ISDN; and, very briefly, DBS.

ii) Winners and Losers

No one can predict with assurance which technologies will succeed - just look at the dismal record of government when it comes to both industrial and science policy. That statement notwithstanding, let me make two of my authorized "wild guesses":

1) i) Fax machines have been around for some time, although they (especially Group III) only seem to have hit libraries in a big way fairly recently. My prediction is that a combination of scanning and networks (including my previous comments about ISDN) is about to eliminate faxes from Document Delivery/ILL. Group IV fax machines will never achieve the necessary critical mass to ensure commercial success. The fax machine is going to go the way of the Telex, only a lot faster.

BUT

ii) The scanning/network operation within the library context will itself constitute a fringe operation in the provision of journal articles in electronic form. Why? I believe that electronic articles, with full graphics, will be provided by commercial vendors, such as BRS, CARL, Compuserve, Dialog, Faxon, Micromedia, OCLC, RLIN, and UMI/Data Courier. The fee will cover all costs (storage, royalty, transmission, copyright) and the fee will be attractively priced. Libraries, especially those within a consortia framework, will be some of those vendors most important clientele.

This is not the first time that an argument has been made suggesting that commercially document delivery will gain primacy or that it will skim off the easiest and most profitable parts of the document delivery business. The major differences in the 1990s will be the ubiquitous spread of both networks and digital documents and aggressive pricing by these firms. I also believe that libraries, acting in concert, will be able to negotiate such favourable terms that in-house document delivery operations will function on the margins.

2) CD-ROM will not be the vehicle for the provision of major bibliographic and textual databases. Commercial online vendors will price their products (especially in conjunction with document delivery service as discussed above) in such a way that CD-ROM will only be appropriate for highly specialized databases. Within this context, I would argue that in many instances these shiny pitted pieces of aluminium only glitter and attract at the present time because of price.

The recent agreement between the National Library of Medicine and the American College of Physicians (ACP) to provide unlimited access to Medline for $200/year is merely the harbinger of things to come. Whether the ACP membership finds "Grateful Med" and "Loansome Doc" to be as attractive is another issue altogether.

The bottom-line conclusion and "wild guess" is this: it is crucial that libraries participate in projects such as Adonis and Ariel in order to understand the pitfalls and potential of these new technologies, to explore the cost implications, to try and make the best possible use of these technologies. But if, and it is a big IF, the commercial suppliers of bibliographic and/or textual databases (especially in combination with document delivery

services) could get their act together over strategic, long-term pricing policy, then Document Delivery/ILL as we know it will have a very different future.

iii) No Guarantee of Success

Success of one technology often feeds off another - image processing, for example, works because of improvements in processing, storage, display technologies and high-speed networks. In a related vein, some technologies are very successful because of mid-life "kickers" - Windows for MS-DOS for example. Another prediction - despite Windows, MS-DOS will not be our principal operating system by the end of the decade. There are a number of reasons for making this argument, not the least of which is an inability of MS-DOS to perform multi-threading, let alone multitasking.

What is much more problematic to guess is the likely successor to MS-DOS. Will it be MV, MVS, Macintosh, OS2, UNIX or a system unknown to me? If the answer is the as-yet-to-be-identified (or yet-to-emerge) system, then I would like to suggest that OSI will play a crucial role in its architecture.

iv) Management Issues

There are some basic (i.e. standard) management issues regarding roles and processes and the necessary infrastructure which will not be elaborated upon here. These would include:

a) a corporate vision and strategic business plan;
b) a framework which ties your chosen technologies to that vision and plan;
c) a system that evaluates all projects and purchases within the context of that framework;
d) a recognition that technology is not an end in and of itself;
e) a phased implementation approach using prototypes or pilot projects;
f) a recognition that this is not a serial, linear process but one calling for continual re-evaluation; and
g) an insistence on high quality at all stages.

4) What if these haven't been the "Right Questions"?

It is easy to be overwhelmed by the complexity of these technologies and how to integrate them into our daily work. What, indeed, are the "right" questions and the "right" answers? Let me suggest that common sense, perspective and a touch of fatalism will help you to cope.

Common Sense

If nothing else, there should always be an ON/OFF switch.

Perspective

Let me give you an anecdotal example which recounts the visit of **Albert Einstein** and his wife to the Mount Wilson Observatory in California. When she asked about the purpose of some very intricate equipment, she was informed that it was used to determine the shape of the universe. Evidently **Mrs. Einstein** was not overly impressed, commenting something to the effect that "my husband uses the back of an old envelope to work that out".

Fate

I considered both Murphy's Law and chaos theory to illustrate this point but settled on the word "SYNERGY". How often have we heard the word synergy to describe the combining of two or more operations and the synergistic (presumably always beneficial) impact of the union of usually diverse corporate cultures, methodologies and technologies? Be that as it may, my **Random House Dictionary of the English Language** tells me that there is a theological dimension to synergism, to wit: "the doctrine that the human will cooperates with the Holy Ghost in the work of regeneration". And, Lord knows, the new technologies have often reduced me to prayer (such reduction includes the preparation of this presentation).

5) What will be the emerging technologies at the beginning of the millennium?

I began this article with a quote about computers as a metaphor for a number of new technologies - let me conclude with another quote about computers from a researcher at the Palo Alto Research Center (PARC) in California. PARC was established in 1970 by Xerox to conduct long-term research into computers, electronics, Artificial Intelligence, integrated circuitry and laser beams. In the early 1970s PARC employed 58 of the top 100 computer scientists in the United States. Ethernet and the first xeroxographic laser printer originated at PARC. So too did the first personal computer, but Xerox did not know what to do with it - and cancelled funding. This is a situation not unique just to Xerox - AT&T, for example, often has the same application problems with what emerges from its Bell Labs.

Today, at PARC, they are experimenting with note pads, blackboards, and shirt badges which talk to each other and to hidden computers (shades of "Star Trek: The Next Generation"). A quote recently attributed to a PARC researcher suggests that: "We are approaching the end of the PC era and we haven't established the metaphor for the next phase of the information revolution." I, too, do not have an answer to this last question and look forward to your comments.

RECOMMENDED READINGS

C. Ian McGibbon. "Effective deployment of emerging technologies". **Canadian Information Processing** June/July 1991: 15-17.

Douglas K. Smith: Robert C. Alexander. **Fumbling the future: How Xerox invented, then ignored, the first personal computer.** New York: William Morrow, 1988.

GRANT FOR UNIVERSITY OF ALBERTA LIBRARY

The University of Alberta Library is pleased to announce the award of a three-year grant totalling $140,000 to the **John W. Scott Health Sciences Library** by the Alberta Heritage Foundation for Medical Research.

This special funding will be used to enhance the Library's ability to retrieve medical information electronically, and to strengthen communication, resource sharing and document delivery with the University of Calgary's Medical Library, which has also received a similar grant from the Foundation.

Speaking on behalf of the Scott Library, its head, Health Sciences Librarian **Sylvia Chetner**, said "in these days of financial restraint we feel extremely fortunate that the Alberta Heritage Foundation for Medical Research has provided us with funding to help meet the information needs of our research community."

For further information, contact:

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FROM THE HEALTH SCIENCES RESOURCE CENTRE

M. Wong

Health Sciences Resource Centre
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PEOPLE ON THE MOVE

David S. Crawford has been appointed Life Sciences Area Librarian, McGill University Libraries, Montreal, Canada. **Mr. Crawford** joined the McGill University Libraries as Assistant Medical Librarian in 1972, and became Assistant Life Sciences Area Librarian in 1974. He has been active in the Canadian Health Libraries Association, as President, and has served on several committees of the Medical Library Association.

IN MEMORIAM

JAKE VANDE BRINK

The Edmonton library community was shocked and saddened by the sudden death of **Jake Vande Brink** on February 22, 1992.

Jake was truly an international citizen, having been born in Indonesia, educated in The Hague, and obtaining his M.L.S. at the Immaculate Heart College in Los Angeles, California.

Jake immigrated to Canada in 1969, where he worked at the Cameron Library, University of Alberta and later at the Yellowhead Regional Library in Spruce Grove. In 1974, **Jake** began a long standing involvement with the health sciences community when he became the librarian at the Edmonton General Hospital. In 1988, when the hospital opened a second site, the Grey Nuns Hospital, **Jake** was instrumental in developing the library. For the past four years, **Jake** managed the libraries at both sites.

Jake will be missed for his warm sense of humour, his inquiring mind and his personal commitment to his colleagues and to the staff and patients whom he served.

Members of the **Northern Alberta Health Libraries Association** are planning to donate a suitable memorial to **Jake** for the Grey Nuns Hospital Library. Anyone wishing to contribute to the fund may send donations to:

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